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United States
Department of
Agriculture

**Animal and
Plant Health
Inspection
Service**

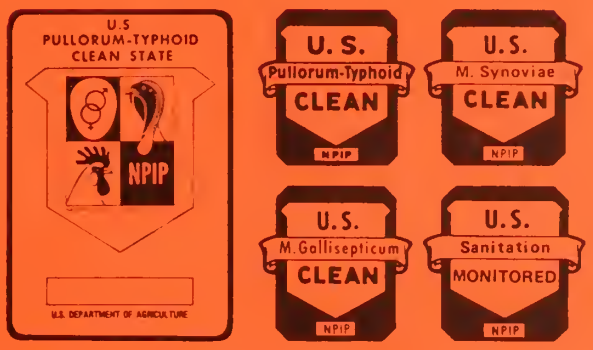
Veterinary
Services

APHIS 91-45
April 1980

National Poultry Improvement Plan

Proposed Changes to be Considered at the National Plan Conference

New Orleans, Louisiana
July 8, 9 and 10, 1980



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PROPOSED CHANGES
in the
NATIONAL POULTRY IMPROVEMENT PLAN

Introductory Statement

Provisions of the National Poultry Improvement Plan are contained in the U.S. Department of Agriculture publication APHIS 91-40, March 1980, National Poultry Improvement Plan and Auxiliary Provisions. The detailed procedure for making changes in the Plan is described in the Auxiliary Provisions, Sections 147.41 through 147.48. Copies of APHIS 91-40, March 1980 are available from each Official State Agency or from the National Poultry Improvement Plan Staff, Animal and Plant Health Inspection Service-Veterinary Services, Building 265, BARC-East, Beltsville, Maryland 20705.

Proposed Changes and supporting statements in this publication were submitted as provided in Section 147.44. They are compiled in this publication for consideration at the 1980 National Plan Conference. The compilation is distributed well in advance of the Conference so that Plan participants and other interested persons may review the proposed changes and inform Conference delegates of their wishes regarding the proposals.

Each State is entitled to one offficial delegate for each of the Subparts, B, C, D, and E of Part 145 in which it has one or more participants at the time of the Conference. Each delegate will act on proposals affecting the provisions of the program which he represents. For reference purposes, delegates are designated as follows:

Subpart B delegates - representing egg-type chickens.
Subpart C delegates - representing meat-type chickens.
Subpart D delegates - representing turkeys.
Subpart E delegates - representing waterfowl, exhibition poultry, and game birds.

This compilation of proposed changes includes, adjacent to the section reference for each proposal, the delegate entitled to vote on the proposal. Some of the changes proposed apply equally to all participants. Conference action on these proposals will be determined by the combined vote of all delegates.

Section numbers shown with each proposal refer to the numerical identification of affected provisions as published in APHIS 91-40, March 1980. A review of the listing of section numbers and titles may help in locating the provisions involved.

PROPOSED CHANGES
in the
NATIONAL POULTRY IMPROVEMENT PLAN

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3	B, C, D, E (Combined)	Deletes reference to a companion pullorum-typhoid eradication program for turkeys which is sponsored by APHIS-VS.	2
4	B, C, D, E (Combined)	Provides for assigning an approval number to all participants and encourages all States to use this number in their import permit system.	3
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6	B, C, D, E (Combined)	Provides that when part of the flock is tested, the sample shall come from all pens or units of the flock.	4
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Proposal No. 1

Delegates:
B, C, D, & E (Combined)

§145.1 Add a new paragraph (ee) to read:

(ee) Equivalent or equivalent requirements. Requirements which are virtually identical to the program, conditions, criteria, or classifications with which compared, as determined by the Official State Agency and with the concurrence of the Service.

REASON:
The words 'equivalent' or 'equivalent requirements' are used quite frequently in various portions of the Plan provisions. Phrases such as "---shall come from U.S. Pullorum-Typhoid Clean or equivalent flocks," or "---U.S. Pullorum-Typhoid Clean breeding flocks or from flocks that met equivalent requirements under---" have frequently prompted questions as to the meaning of 'equivalent.' In an effort to standardize the meaning of this word as its used in relation to the Plan, we submit the above proposed change.

PROPONENT:
Poultry Improvement Staff, National Poultry Improvement Plan.

Proposal No 2

Delegates:
B, C, D & E (Combined)

§145.2 Add a new paragraph (e) to read:

(e) The cooperating Official State Agency shall concur with the Service in its request to the U.S. Postal Service that no mail shipments of poultry, baby poultry, or hatching eggs into or within the State shall be made unless the product qualifies as U.S. Pullorum-Typhoid Clean or as equivalent to this classification under a State supervised program. The pullorum-typhoid status of the product shall be stated on each carton, box, or bundle of boxes by use of a label or other type of identification which has been approved by the Official State Agency and the Service.

REASON:
The delegates to the 1976 National Plan Conference asked the General Conference Committee to study the desirability of requiring all poultry and hatching eggs sent through the mail to come from a U.S. Pullorum-Typhoid Clean or equivalent source. The GCC discussed this request at their April 1977 meeting. They reasoned that since most of the baby poultry and hatching eggs being sent through the mail originate from small commercial or exotic,

exhibition type breeding flocks, and since most of the specimens from which pullorum-typhoid is isolated originate from these flocks, a proposal to restrict such shipments to P-T Clean or equivalent products would aid in reducing the spread of these organisms. This proposal was made at the 1978 National Plan Conference. The voting delegates recommended to the Department that it become part of the Plan provisions. However, the Department rejected the proposal because of questionable legality of enforcement by the U.S. Postal Service in those three States which have not signed a Memorandum of Understanding with the Department relative to the work of the National Plan. Efforts are being made to provide the necessary services in these three State to qualify products for shipment through the Postal Service. These services would be provided through the Plan or by equivalent programs. Because of these developments, this proposal is again being submitted for the consideration of the Conference, and for subsequent concurrence by the Department if recommended for adoption by the delegates.

PROPONENT:
General Conference Committee of the National Poultry Improvement Plan.

Proposal No. 3

Delegates:
B, C, D, & E (Combined)

§145.4 Delete the following from paragraph (d).

(d) "..., except turkey breeding stock, hatching eggs, and poults produced in a State qualified for Phase I or II of the pullorum-typhoid eradication program described in the November 6, 1972 Memorandum Number 565.1 of the Veterinary Services of the Animal and Plant Health Inspection Service of the Department:"

REASON:
The program provided for by Memorandum 565.1 is nearly identical to that provided for in §145.44 (b), U.S. Pullorum-Typhoid Clean State, Turkeys. Since both programs are now in the same agency of the Department, the one should be inactivated in favor of the other.

PROPONENT:
Mississippi Poultry Association, Inc., and Mississippi Board of Animal Health.

Proposal No. 4

Delegates:
B, C, D, & E (Combined)

§145.4 Add new paragraph (e) to read:

(e) Each participating hatchery, dealer and independent flock shall be assigned a permanent approval number by the Service. This number, prefaced by the numerical code of the State, will be the official approval number of the participant and may be used on each certificate, invoice, shipping label or other document used by the participant in the sale of his products. Each Official State Agency which requires an approval or permit number for out-of-State participants to ship into their State should honor this number.

AND

§145.9 Delete 2nd, 3rd, and 4th sentences.

REASON:
Using the approval number as issued by the NPIP for use as a national shipment number into other states will reduce time and paper work for both the participant making shipment and the Official State Agencies in issuing importation numbers. This will also aid in eliminating possible duplication of importation approval numbers issued by various states.

PROPONENT:
Iowa Poultry Association, National Plans Division, 535 E. Lincoln Way, Ames, IA 50010, and Dr. Charles J. Wabeck, Ext. Poultryman, University of Maryland, Salisbury, MD 21801.

Proposal No. 5

Delegates:
B, C, D, & E (Combined)

§145.13 Delete paragraph (a) and redesignate paragraph (b) as paragraph (a).

REASON:
The above action would delete the definition of "Director." Since "Director" is not used in this Section, there is no need to define it.

PROPONENT:
Poultry Improvement Staff, National Poultry Improvement Plan.

Proposal No. 6

Delegates:
B, C, D, & E (Combined)

§145.14 Add to the introductory paragraph:

For those programs where a sample of the poultry may be tested in lieu of the entire flock, the poultry tested shall be a random sample drawn on a pro rata basis from all pens or units of the flock.

AND

§145.14(a) Delete the second sentence from subparagraph (5).

REASON:
This proposal would provide that any sample of poultry to be tested as part of an official program be drawn on a pro rata basis from all pens or units of the flock. At present, this requirement only applies to flock being tested for pullorum-typhoid. By moving the provision to the introductory paragraph, it will apply to both Salmonella and Mycoplasma testing programs.

PROPONENT:
Poultry Improvement Staff, National Poultry Improvement Plan.

Proposal No. 7

Delegates:
D

§145.14(a) Delete the following from the next-to-last sentence of subparagraph (5):

(a)(5) "...except that when the flock involved is turkeys, the period during which all birds must be tested shall be 2 years."

REASON:
We see no difference in the chicken flocks and turkey flocks if pullorum or typhoid is found in a flock. We feel that with proper disinfecting of the farm and two consecutive negative tests the flock will remain clean.

PROPONENT:
Mississippi Poultry Association, Inc., and Mississippi Board of Animal Health.

Proposal No. 8

Delegates: B, C, D, & E (Combined)

§145.14(a) Change subparagraph (6) by adding the underscored portion to read:

(a)(6) All domesticated fowl, except waterfowl, on the farm of the participant shall either be properly tested to meet the same standards as the particpating flock or these fowl and their eggs shall be separated from the participating flock and its eggs: Provided, That if the participating flock is located in a State which is a candidate for the designation "U.S. Pullorum-Typhoid Clean State," all domesticated fowl must meet the same testing requirements as a participating flock.

REASON:
The above section, which applies to all Plan participants, previously stated that if waterfowl were on the premises of a participant, they neither had to be blood tested nor separated from the participating flock and its eggs. Section 145.23 (b) (3) (ii) (and related portions of Subparts C, D, & E) sets forth one of the prerequisites for a State to become a "U.S. Pullorum-Typhod Clean State." Under §145.23(b)(3)(ii), if there are waterfowl on the same premises as the participating flock, these waterfowl must be blood tested. Thus, there were conflicting provisions. By the addition of the underscored portion to the above provision, this conflict would be eliminated by requiring waterfowl on premises of a participating flock to be blood tested if the flock is located in a State which is a candidate for the "U.S. Pullorum-Typhoid Clean State" designation.

NOTE:
Proposal No. 10 provides that waterfowl, under the above conditions, would not have to be blood tested. One or the other, but NOT BOTH proposals could be adopted.

PROPONENT:
General Conference Committee, National Poultry Improvement Plan.

Proposal No. 9

Delegates:
B

§145.22(a) Add a new sentence to read:

(a)----The minimum weight of hatching eggs which are produced by the progeny of a primary breeding flock and are used for the production of multiplier breeding flocks shall be at least 1 11/12 ounces each.

REASON:
By not setting small eggs you will have a more uniform multiplier breeder flock. The birds will live better and probably resist disease better. For the past couple of years we have seen some baby chicks which, in our opinion, were from eggs that were too small.

PROPONENT:
Mississippi Poultry Association, Inc., and Mississippi Board of Animal Health.

Proposal No. 10

Delegates:
B, C, D, & E (Combined)

§145.23(b)(3) §145.33(b)(3) §145.43(b)(3) §145.53(b)(3) Change that portion of subsection (ii) following "Provided" to read:

(b)(3)(ii)....: Provided, That if other domesticated fowl, except waterfowl, are maintained on the same premises as the participating flock, freedom from pullorum-typhoid infection shall be demonstrated by an official blood-test of each of these fowl;

REASON:
Proposal No. 7 provides that all waterfowl on the same premises as that of a participating flock must be blood-tested if the flock is located in a State which is a candidate for the designation "U.S. Pullorum-Typhoid Clean State." However, since P-T has only been isolated from three waterfowl specimens during the past 10 years, as reported to the NPIP Staff, there is some feeling that we may not need to test waterfowl which are incidental to the participating flock. Therefore, the above proposal is being made to excuse waterfowl from being tested. (Unless an official P-T classification is desired for the breeding flock of waterfowl, in which case they would be tested the same as any other flock).

Proposal No. 10 - Continued

NOTE:
Either this proposal or proposal No. 8 could be adopted but NOT BOTH.

PROPONENT:
Poultry Improvement Staff, National Poultry Improvement Plan.

Proposal NO. 11

Delegates:
B

§145.23(c)(1) Change subdivisions (i), (ii) and (ii)(a) to read:

(c)(1)(i) It is a flock in which all birds or a sample of at least [500] 300 birds in the flock has been tested for M. gallisepticum as provided in §145.14(b) when more than 4 months of age: Provided, That to retain this classification, [a random sample of 5 percent of the birds in the flock, with a maximum of 500 birds and] a minimum of [100] 150 birds shall be tested at intervals of not more than 90 days: And provided further, That, at the discretion of the Official State Agency and with the concurrence of the Service a sample comprised of less than [5 percent] 150 birds may be tested at any one time provided that [a total of at least 5 percent of the birds in the flock, with a maximum of 500 birds and] a minimum of [100] 150 birds is tested within a 90 day period; or

(c)(1)(ii) It is a multiplier breeding flock which originated as U.S. M. Gallisepticum Clean chicks from primary breeding flocks and a sample comprised of [50 percent of the birds in the flock, with a maximum of 200 birds and] a minimum of [30] 150 birds per flock, has been tested for M. gallisepticum as provided in §145.14(b) when more than four months of age: Provided, That to retain this classification, the flock shall be subjected to one of the following procedures:

(c)(1)(ii)(a) At intervals of not more than 90 days, a random sample of [at least two percent of the birds in the flock, with a maximum of 100] 75 birds and a minimum of 30 birds per pen, whichever is greater, shall be tested; or

Proposal No. 11 - Continued

AND

§145.23(e)(1) Change subdivisions (i) and (ii) to read:

(e)(1)(i) It is a flock in which [5 percent, or a maximum sample of 500 birds and] a minimum of [30] 300 birds in the flock has been tested for M. synoviae as provided for in §145.14(b) when more than 4 months of age: Provided, That to retain this classification, a random sample of at least [3 percent of the birds, with a maximum of 500] 150 birds [and a minimum of 30 birds,] shall be tested at intervals of not more than 90 days: And provided further, That, at the discretion of the Official State Agency and with the concurrence of the Service, a sample comprised of less than [3 percent] 150 birds may be tested at any one time, provided that [a total of at least 3 percent of the birds in the flock, with a maximum of 500 birds and] a minimum of [30] 150 birds is tested within each 90 day period; or

(e)(1)(ii) It is a multiplier breeding flock which originated as U.S. M. Synoviae Clean chicks from primary breeding flocks and a sample of [one percent of the birds in the flock, with a maximum of 100] 75 birds [and minimum of 30 birds,] has been tested for M. synoviae as provided in §145.14(b) when more than four months of age: Provided, That to retain this classification, a random sample of [at least one percent of the birds, with a maximum of 60] 50 birds [and a minimum of 30 birds,] shall be tested at intervals of not more than 90 days: And provided further, That a sample of less than [one percent] 50 birds may be tested any one time, provided that a minimum of 30 birds per flock with a minimum of 15 birds per pen, whichever is greater, is tested each time and a total of at least [one percent of the birds, or a maximum of 60] 50 birds, is tested within each 90-day period.

NOTE: The above provisions, including the bracketed portions, are in the Plan at present. This proposal would change these bracketed portions to the figures given in the underscored portions.

Proposal No. 11 - Continued

REASON:
As is shown in the attached table, the present regulations permit a good deal of discrepancy between the accuracy of the detection of reactors in large flocks and that in small flocks. This is because the accuracy is primarily a function of the size of the sample (for flocks of over a few hundred), rather than of the percent of the population sampled.

The proposed changes are intermediate in accuracy between the two extremes in the present regulation. In each case, the maximum sample size is reduced, but the probability of detecting reactors is greater than with the present minimum permitted sample size. The sample size could only be substantially reduced for small flocks (about 400 or less) and would have to be read from a table based on the hypergeometric distribution. The proposed single number is less confusing and will give more reliable readings.

The proposed changes are designed to give a 95% probability of detecting one or more reactors with the frequency of reactors at which detection is desired varying from 1% to 6%, depending on whether MG or MS is involved and whether it is the first or subsequent check.

PROPONENT:
Dr. James A. Arthur, Research Director, Hy-Line International, Dallas Center, IA 50063

Present and Proposed Sampling
for MG and MS Clean Status

Paragraph	Situation	Probability (P) of Finding at Least One Reactor in Sample of Smallest Permissible Size Relative to Total Population if Frequency of Reactors is 1% in Total Flock							Proposed ① Change Which Would Detect at Least 1 Reactor in Sample 95% of Time if Frequency of Reactors in Flock Were:
		Present Regulations					Proposed Regulation		
		Required % Sample Size	Maximum Sample Size No.	Maximum Sample Size P ①	Minimum Sample Size No.	Minimum Sample Size P ②	No.	P ①	
145.23(c)(1)(i)	MG - 1st check	100	500	0.99	-	-	300	0.95	0.01
	MG - subsequent checks	5	500	0.99	100	0.64	150	0.78	0.02
145.23(c)(1)(ii) & (iia)	MG - Multiplier flocks 1st check	50	200	0.87	30	0.50	150	0.78	0.02
	MG - Multiplier flocks subsequent checks	2	100	0.63	30	0.26	75	0.52	0.04
145.23(e)(1)(i)	MS - 1st check	5	500	0.99	30	0.27	300	0.95	0.01
	MS - subsequent checks	3	500	0.99	30	0.26	150	0.78	0.02
145.23(e)(1)(ii)	MS - Multiplier flocks 1st check	1	100	0.63	30	0.26	75	0.52	0.04
	MS - Multiplier flocks subsequent checks	1	60	0.45	30	0.26	50	0.39	0.06

① Assumes very large (infinite) population and binomial distribution.
② Assumes largest possible population with given % sample size and minimum number permitted - hypergeometric distribution.

Proposal No. 12

Delegates:
B

§145.23(c)(1)(ii) Delete subdivision (c).

REASON:
Laboratory studies have revealed that cull chick serology, even when testing 100 chicks, is inconsistent in revealing M. gallisepticum (MG) antibodies. This procedure was long recognized to be inadequate for the detection of M. synoviae antibodies and has already been deleted from all other sections relating to MG testing of egg and meat-type chickens. In view of the high losses incurred to table egg producers from MG it is advisable to use only the most reliable techniques in evaluating multiplier egg-type breeders.

PROPONENT:
Dr. E. T. Mallinson, Chief, Avian Health Division, Pennsylvania Bureau of Animal Industry, Harrisburg, Pennsylvania.

Proposal No. 13

Delegates:
B

§145.23(d)(1) Change subdivision (v) to read:

(d)(1)(v) Hatching eggs are collected at least four times a day and are handled as described in §147.22 and fumigated on-the-farm as described in §147.25 (a) of this chapter or handled in an alternate sanitary manner acceptable to the Official State Agency and approved by the Service; and

REASON:
Some hatchermen believe that on the farm fumigation may weaken the hatching egg cuticle and predipose it to later contamination. Additionally, this procedure poses certain logistic and safety problems that may discourage applications for U.S. Sanitation Monitored classifications. This proposal would enable hatcheries to select alternate approaches. If monitoring reveals these alternates are not doing the job, the hatchery and Official State Agency will need to seek other approaches, including on the farm fumigation.

PROPONENT:
Dr. E. T. Mallinson, Chief, Avian Health Division, Pennsylvania Bureau of Animal Industry, Harrisburg, Pennsylvania.

Proposal No. 14

Delegates:
B

§145.23 Add a new paragraph (f) to read:

(f) U.S. M. Gallisepticum Clean Started Poultry. (1) A flock which originated from U.S. M. Gallisepticum Clean breeding flocks and was hatched in a hatchery approved by the Official State Agency for the production of U.S. M. Gallisepticum Clean chicks.

(f)(2) All other poultry on the premises of the candidate flock must originate from U.S. M. Gallisepticum Clean sources.

(f)(3) The flock is maintained in compliance with the provisions of §147.26.

(f)(4) The flock's freedom from M. gallisepticum is demonstrated by the following:

(f)(4)(i) Approximately 30 days prior to the flock being moved to laying quarters, a sample of 100 birds shall be tested for M. gallisepticum, as provided in §145.14(b); and

(f)(4)(ii) Approximately 10 days prior to the flock being moved to laying quarters, a sample of 200 birds shall be tested for M. gallisepticum, as provided in §145.14(b).

(f)(5) Started poultry shall be delivered in crates and vehicles which have been cleaned and disinfected, as described in §147.24(a) of this chapter.

REASON:
There appears to be continuing interest in some type of M. gallisepticum certification program for started pullets. As more and more table egg producers are ridding their premises of M. gallisepticum, they are demanding that replacement pullets be free of this disease. The General Conference Committee members discussed at length the pros and cons of a program such as this, and although they were not unanimous in their opinion, they did recommend that this subject again be presented to the delegates at this year's Conference.

PROPONENT:
General Conference Committee, National Poultry Improvement Plan.

Proposal No. 15

Delegates:
B

§145.23 Add a new paragraph (f) to read:

(f) U.S. Certification Program for Started Poultry. This voluntary program is designed to recommend and document various health and management practices carried out during the raising of started poultry. It will provide the started poultry buyer with certain information attesting to the practices which were carried out and to the current health status of the flock. The participant must make application to the Official State Agency for this certification at least 30 days prior to the chicks being hatched.

(f)(1) In order for a flock to participate in this program the flock and all other poultry on the same premises must originate from U.S. M. Gallisepticum Clean breeding flocks.

(f)(2) The participating flock and all other poultry on the same premises are maintained in compliance with the provision of §147.26 of this chapter.

(f)(3) The flock shall be blood tested for M. gallisepticum, as described in §145.14 (b), in accordance with the following:

(f)(3)(i) A random sample of two percent of the birds in the flock, with a maximum of 100 birds and a minimum of 30 birds shall be tested 45 days before the flock is to be moved to laying quarters;

(f)(3)(ii) A random sample of 50 percent of the birds in the flock, with a maximum of 200 birds and a minimum of 30 birds, shall be tested within 15 days of the flock being moved to laying quarters.

(f)(4) A vaccination program, tailored to the needs of the flock in the area where it is grown and for the area where it is to be housed in laying quarters, will be provided for the participating flock.

(f)(5) The State Inspector shall certify, either through personal observations or through acceptable documentation, that the following facts and conditions exist or have existed in the flock being certified for this program:

Proposal No. 15 - Continued

(f)(5)(i) The age of the flock;

(f)(5)(ii) The breed, strain, or trade name of the birds in the flock;

(f)(5)(iii) The feeding program used; i.e., restricted, modified restricted, full feed, etc.;

(f)(5)(iv) Vaccination program for the flock, including vaccines, methods of administering, age of birds, frequency of vaccination, and titer 15 days prior to the time birds are to be moved to laying quarters.

(f)(5)(v) Results of M. gallisepticum testing at 45 days and 15 days prior to flock being moved to laying quarters.

(f)(5)(vi) A visual inspection of the flock shall be made within 15 days of the flock being moved to laying quarters. Any visible signs of unhealthy or unthrifty birds will be followed by specimens being sent to a diagnostic laboratory. Any abnormal conditions will be reported on the certificate.

(f)(6) Flock complying with provisions contained in subparagraph (1) through (5) of this section may be deemed to be participating in the U.S. Certification Program for Started Poultry.

REASON:
The started pullet business is becoming such a large part of the poultry industry that it should be part of the National Plan. Somewhere in the poultry industry we have some responsibility to the customer that is buying these started pullets. We hope that the delegates to this conference will come prepared to add to, to take away from, and to make amendments if necessary to come up with some kind of program to protect the purchaser of started pullets and further the progress of the National Poultry Improvement Plan and to protect and promote the Poultry Industry in the United States.

PROPONENT:
Mississippi Poultry Association, Inc., and Mississippi Board of Animal Health.

Proposal No. 16

Delegates:
C

§145.32 Add a new sentence to paragraph (a) to read:

(a)----The minimum weight of hatching eggs which are produced by the progeny of a primary breeding flock and are used for the production of multiplier breeding flocks shall be 1 10/12 ounces each.

REASON:
By not setting small eggs you will have a more uniform multiplier breeding flock. The birds will live better and probably resist disease better. For the past couple of years we have seen some baby chicks which, in our opinion, were from eggs that were too small.

PROPONENT:
Mississippi Poultry Association, Inc., and Mississippi Board of Animal Health.

Proposal No. 17

Delegates:
C

§145.33(c)(1) Change subdivision (i) to read:

(c)(1)(i) It is a flock in which all birds, or a sample of at least 500 birds in the flock has been tested for M. gallisepticum as provided in §145.14 (b) when more than 4 months of age: Provided, That to retain this classification, a random sample of 5 percent of the birds in the flock, with a maximum of 500 birds and a minimum of 100 birds, shall be tested at intervals of not more than 90 days: And provided further, That, at the discretion of the Official State Agency and with the concurrence of the Service, a sample comprised of less than 5 percent may be tested at any one time provided that a total of at least 5 percent of the birds in the flock, with a maximum of 500 birds, and a minimum of 100 birds, is tested within each 90-day period;

Proposal No. 17 - Continued

REASON:
For the past several years the 2 generations in meat-type birds has been required. By changing this paragraph it will read the same as egg type chickens. We have some hatcheries that hatch both types, meat type and egg type, and they have asked what the difference is in meat type and egg type. I think this will make it much easier for the participants to comply with the regulations in regard to the paper work if both requirements are the same. (We are not so hung up on this. If this should continue to be this way it will be o.k.)

PROPONENT:
Mississippi Poultry Association, Inc., and Mississippi Board of Animal Health.

Proposal No. 18

Delegates:
C

§145.33(d)(1) Change subdivision (v) to read:

(v) Hatching eggs are collected at least four times a day and are handled as described in §147.22 and fumigated on the farm as described in §147.25 (a) of this chapter or handled in an alternate sanitary manner acceptable to the Official State Agency and approved by the Service; and

REASON:
Some hatcherymen believe that on the farm fumigation may weaken the hatching egg cuticle and predispose it to later contamination. Additionally, this procedure poses certain logistic and safety problems that may discourage applications for U.S. Sanitation Monitored classification. This proposal would enable hatcheries to select alternate approaches. If monitoring reveals these alternates are not doing the job, the hatchery and Official State Agency will need to seek other approaches, including on the farm fumigation.

PROPONENT:
Dr. E. T. Mallinson, Chief, Avian Health Division, Pennsylvania Bureau of Animal Industry, Harrisburg, Pennsylvania.

Proposal No. 19

Delegates:
D

§145.43 Add a new paragraph (e) to read:

(e) U.S. M. Synoviae Clean (1) All birds, or a sample of at least 300 birds from flocks of more than 300 and each bird in flocks of 300 or less, have been tested for M. synoviae when more than four months of age: Provided, That to retain this classification all birds or a sample of at least 300 birds shall be retested at 28-30 weeks and again at midpoint of lay or test at least 50 birds per flock at four to six week intervals throughout the laying period. Whenever signs of a respiratory disease is observed in any flock, at least 50 samples shall be tested.

(e)(2) The official blood test for M. synoviae shall be either the serum plate agglutination test, the tube agglutination test, the hemagglutination inhibition (HI) test, or a combination of two or more of these tests. The HI test shall be used to confirm the positive results of other serological tests.

(e)(3) The tests shall be conducted using M. synoviae antigens approved by the Department or the Official State Agency and shall be performed in accordance with the recommendations of the producer of the antigen.

(e)(4) When reactions to the official test are found at least 100 tracheal swabs and blood samples shall be submitted to a laboratory for serological and cultural examinations or a sample of the birds reacting to the official tests shall be submitted to the laboratory for further serological and cultural examinations.

(e)(5) If a Mycoplasma is isolated, the organism must be serotyped by the Fluorescent Antibody Test or the Growth Inhibition Test. If M. synoviae is isolated, the flock shall be considered infected.

REASON:
Some primary breeders are in the process of developing turkey breeding flocks free of M. synoviae infection. There is need to develop criteria that will identify breeding flocks that are free of the infection so that the turkey industry will be aware of flocks that have met certain official criteria.

PROPONENT:
Dr. Ben S. Pomeroy and Dr. John A. Newman, University of Minnesota and Dr. Harry R. Olson, Minnesota Livestock Sanitary Board.

Proposal No. 20

Delegates:
D

§145.43 Add a new paragraph (f) to read:

(f) U.S. M. Meleagridis Clean. (1) A flock in which freedom from M. meleagridis has been demonstrated under the following criteria:

(f)(1)(i) All birds, or a sample of at least 300 birds from flocks of more than 300 and each bird in flocks of 300 or less, have been tested for M. meleagridis when more than four months of age: Provided, That to retain this classification all birds or a sample of at least 300 birds shall be retested at 28-30 weeks and again at midpoint of lay or test at least 50 birds per flock at four to six week intervals throughout the laying period. Whenever signs of a respiratory disease are observed in any flock at least 50 samples shall be tested.

(f)(2) The official blood test for M. meleagridis shall be either the serum plate agglutination test, the tube agglutination test, the hemagglutination inhibition (HI) test, or a combination of two or more of these tests. The HI test shall be used to confirm the positive results of other serological tests.

(f)(3) The tests shall be conducted using M. meleagridis antigens approved by the Department or the Official State Agency and shall be performed in accordance with the recommendations of the producer of the antigen.

(f)(4) When reactors to the official test are found, at least 100 tracheal swabs and/or vaginal or phallus swabs and blood samples shall be submitted to a laboratory for serological and cultural examinations.

(f)(5) If a Mycoplasma is isolated, the organism must be serotyped by the Fluorescent Antibody Test or the Growth Inhibition Test. If M. meleagridis is isolated, the flock shall be considered infected.

AND

§145.10 Add a new paragraph (f) to read:

Proposal No. 20 - Continued

(f) U.S. M. Meleagridis Clean - (see 145.43 (f)).

Figure 11

REASON:
Some primary breeders are in the process of developing turkey breeding flocks free of M. meleagridis infection. There is need to develop criteria that will identify breeding flocks that are free of the infection so that the turkey industry will be aware of flocks that have met certain official criteria.

PROPONENT:
Dr. Ben S. Pomeroy and Dr. John A. Newman, University of Minnesota and Dr. Harry R. Olson, Minnesota Livestock Sanitary Board.

Proposal No. 21

Delegates:
E

§145.53(b) Change subparagraph (5) by adding underscored words to read:

It is a primary.....with no reactors: Provided, That a bacteriological or serological examination monitoring program acceptable to the Official State Agency and approved by the Service may be used in lieu of annual blood testing.

REASON:
The reliability of bacteriological monitoring to detect low infection levels of S. pullorum or S. gallinarum that may be encountered in these types of poultry, to the exclusion of other more rapidly growing paratyphoid salmonella species, is questionable. An acceptable, approved serologic examination monitoring program would be an equal or superior alternative. Serologic procedures for pullorum-typhoid have a long history of success in reliably detecting infection, whereas the long term dependability of bacteriological examination monitoring programs for more fastidious species, such as S. pullorum and S. gallinarum, remains uncertain.

PROPONENT:
Dr. E. T. Mallinson, Chief, Avian Health Division, Pennsylvania Bureau of Animal Industry, Harrisburg, Pennsylvania.

Proposal No. 22

Delegates:
E

§145.53(c)(1) Change subdivisions (i) and (ii) to read:

(c)(1)(i) It is a flock in which all birds or a sample of at least 300 birds in the flock has been tested for M. Gallisepticum as provided in §145.14 (b) when more than 4 months of age or upon reaching sexual maturity: Provided, That to retain this classification a random sample of at least 5 percent of the birds in the flock, with a minimum of 100 birds, shall be tested at intervals of not more than 90 days; And provided further, That at the discretion of the Official State Agency and with the concurrence of the Service, a sample comprised of less than 5 percent may be tested at any one time, provided that a total of at least 5 percent of the birds in the flock, with a minimum of 100 birds, is tested within each 90-day period; or

Proposal No. 22 - Continued

(c)(1)(ii) It is a multiplier breeder flock which originated as U.S. M. Gallisepticum Clean baby poultry from a primary breeder flock and a random sample comprised of 50 percent of the birds in the flock, with a maximum of 200 birds and a minimum of 30 birds per flock has been tested for M. Gallisepticum as provided in §145.14 (b) when more than 4 months of age or upon reaching sexual maturity: Provided, That to retain this classification, the flock shall be subjected to one of the following procedures:

REASON:
This will permit classification of a Subpart E primary breeding flock as U.S. M. Gallisepticum Clean based on a sample test. At present, the flock would have to have a 100 percent test for 2 generations before it would be eligible to qualify on a sample test. This amendment is the same as is being proposed for meat-type chicken primary breeding flocks. The proposal also reduces the maximum sample size necessary to qualify a multiplier flock, thus bringing it in line with both the egg and meat-type multiplier flock requirements.

PROPONENT:
Mississippi Poultry Association, Inc., and Mississippi Board of Animal Health.

Proposal No. 23

Delegates:
E

§145.53 Designate paragraph (d) as "Reserved" and add a new paragraph (e) to read:

(e) U.S. M. Synoviae Clean. (1) A flock maintained in compliance with the provisions of §147.26 and in which freedom from M. synoviae has been demonstrated under the criteria specified in paragraph (e)(1)(i) or (ii) of this section.

(e)(1)(i) It is a flock in which 5 percent, or a maximum sample of 300 birds and a minimum of 100 birds in the flock has been tested for M. synoviae as provided for in §145.14(b) when more than 4 months of age or upon reaching sexual maturity: Provided, That to retain this classification, a random sample of at least 5 percent of the birds, with a maximum of 100 birds and a minimum of 30 birds, shall be tested at intervals of not more than 90 days:

And provided further, That, at the discretion of the Official State Agency and with the concurrence of the Service, a sample comprised of less than 5 percent may be tested at any one time provided that a total of at least 5 percent of the birds in the flock, with a maximum of 300 birds and a minimum of 30 birds, is tested within each 90-day period.

(e)(1)(ii) It is a multiplier breeding flock which originated as U.S. M. Synoviae Clean chicks from primary breeding flocks and a sample of one percent of the birds in the flock, with a maximum of 100 birds and a minimum of 30 birds, has been tested for M. synoviae as provided in §145.14(b) when more than four months of age or upon reaching sexual maturity. Provided, That to retain this classification, a random sample of at least one percent of the birds, with a maximum of 60 birds and a minimum of 30 birds, shall be tested at intervals of not more than 90 days: And provided further, That a sample of less than one percent may be tested at any one time, provided that a minimum of 30 birds per flock, with a minimum of 15 birds per pen, whichever is greater, is tested each time and a total of at least one percent of the birds, or a maximum of 60 birds, is tested with each 90-day period.

(e)(2) A participant handling U.S. M. Synoviae Clean products shall keep these products separate from other products in a manner satisfactory to the Official State Agency: Provided, That U.S. M. Synoviae Clean chicks from primary breeding flocks shall be produced in incubators and hatchers in which only eggs from flocks qualified under paragraph (e)(1)(i) or (ii) of this section are set.

(e)(3) U.S. M. Synoviae Clean chicks shall be boxed in clean boxes and delivered in trucks that have been cleaned and disinfected as described in §147.24(a).

REASON:
This proposal would provide for an official M. synoviae program for Subpart E fowl. Encouraging this segment of the industry to control this disease would not only be of benefit to these birds, but would also lessen the chance of cross-contamination with commercial egg and meat-type birds and turkeys.

PROPONENT:
Mississippi Poultry Association, Inc., and Mississippi Board of Animal Health.

Proposal No. 32

Delegates:
B

§145.1 Change paragraph (p) to read:

(p) Started Poultry. Flocks or individual chickens, either breeder or layer, male or female, which are reared by one party and subsequently sold to a second party within the State or moved between States for any reason at any age but usually prior to onset of egg production.

AND

§145.23 (c)(1) Add a new subdivision (iii) to read:

(c)(1)(iii)(a) It is a flock of started poultry which originated as baby poultry from a U.S. M. Gallisepticum Clean breeding flock and is reared on a premises which contains no other poultry, or on a premises where all other poultry are from U.S. M. Gallisepticum Clean breeding flocks, and are qualified or candidates for the U.S. M. Gallisepticum Clean started poultry classification, and its freedom from M. gallisepticum has been demonstrated by a negative blood-test of a random sample of 100 birds, or all birds if less than 100, from each building housing the flock, at three weeks and again at one week prior to the flock being moved to laying quarters.

(c)(1)(iii)(b) It is a flock of started poultry in which a random sample of 100 birds from each building is tested for M. gallisepticum at five weeks and three weeks prior to being moved to laying quarters, and 5% of the flock, with a minimum of 200 and a maximum of 500 birds per building is tested one week prior to being moved to laying quarters, and all tests are found to be negative.

AND

§145.23 (e)(1) Add a new subdivision (iii) to read:

(e)(1)(iii)(a) It is a flock of started poultry which originated as baby poultry from a U.S. M. Synoviae Clean breeding flock and is reared on a premises which contains no other poultry, or on a premises where all other poultry are from U.S. M. Synoviae Clean breeding flocks and are qualified or candidates for the U.S. M. Synoviae Clean started poultry classification, and its freedom from M. synoviae has been demonstrated by a negative blood-test of a random sample of 30 birds, or all birds if less than 30, from each building housing the flock at three weeks and again at one week prior to the flock being moved to laying quarters.

Proposal No. 32 - Continued

(e)(1)(iii)(b) It is a flock of started poultry in which a random sample of 50 birds from each building is tested for M. synoviae one week prior to the flock being moved to laying quarters, and the tests were found to be negative.

REASON
This proposal was made by a member of the General Conference Committee who had intended for its provisions to be considered by the GCC subcommittee when it developed Proposal 14. However, it was received too late for this purpose and is presented here for the consideration of the delegates, While in committee, Subpart B delegates may want to consider this as a separate proposal, or they may want to consider it in relation to Proposals 14 and 15, taking the best from all three proposals and developing an amended proposal which would give certain recognition to started poultry flocks.

PROPONENT:
General Conference Committee, National Poultry Improvement Plan.

Proposal No. 24

Delegates:
B, C, D, & E (Combined)

§147.6(b) Change subparagraph (3) by adding underscored words to read:

(b)(3) If the HI test is negative, the flock may or may not qualify, at the discretion of the Official State Agency.

REASON:
Suggested changes adds clarity to options open to the Official State Agency. Laboratory studies have proven testing situations exist where flocks positive for MG by culture were positive or suspicious for MG on serum plate test and yet negative on HI test.

AND

§147.6(b) Change subparagraph (9) by deleting bracketed portions and adding underscored portions to read:

(b)(9) If the HI test is negative, the flock [qualifies] may or may not qualify, at the discretion of the Official State Agency.

REASON:
Suggested change adds clarity to options open to the Official State Agency. Laboratory studies have proven testing situations exist where flocks positive for MG by culture were positive or suspicious for MG on serum plate test and yet repeatedly negative on HI test.

PROPONENT:
Dr. E. T. Mallinson, Chief, Avian Health Division, Pennsylvania Bureau of Animal Industry, Harrisburg, Pennsylvania.

Proposal No. 25

Delegates:
B, C, D, & E (Combined)

Part 147 Change section (11) to read:

SUBPART B--BACTERIOLOGICAL EXAMINATION PROCEDURES

§147.11 Laboratory procedure recommended for the bacteriological examination of Salmonella reactors.

(a) Grossly normal or diseased liver, heart, pericardial sac, spleen, lung, kidney, pancreas, peritoneum, drained gall bladder, oviduct, misshapen ova, testes, inflamed or unabsorbed yolk sac, and other visibly pathological tissues where purulent, necrotic, or proliferative lesions are seen (including cysts, abscesses, hypopyon, and inflamed serosal surfaces), should be directly cultured by means of a flamed wire loop or with sterile swabs.[1/] Careful aseptic technique must be utilized throughout the process of collecting tissues. Selective media should not be relied upon to deal with contaminants, since some strains may not dependably survive and grow in certain selective media. Inoculate veal infusion (VI) and brilliant green (BG) agar plates and deposit each swab in 10-mL of tetrathionate brilliant green (TBG) broth.[2/] Incubate the plates and broth for 24 hours at 37°C. Plate the TBG broth on VI and BG agar and incubate at 37°C. Examine these plates after 24 and 48 hours of incubation. Replate as necessary. The digestive system should always be cultured separately (see paragraph (f) of this section), after other anatomical organs and systems have been collected and cultured.

(b) The following organs should be aseptically collected for a composite culture:

[1/] Culture media preparation and biochemical identification charts can be obtained from Culture Methods for the Detection of Animal Salmonellosis and Arizonosis, Committee on Salmonellosis and Arizonosis, AAVLD, 1976 Iowa State University Press, Ames, IA 50010.

[2/] Tryptose or beef extract agar plates may be substituted for the VI plates. Shigella-Salmonella (SS) and Bismuth-Sulfite (BS) agar plates may be substituted, if preferred, for BG agar plates: Provided, That contamination is held to a minimum. BS agar is recommended for the maximum isolation of arizonae.

Proposal No. 25 - Continued

(b)(1) Heart (apex, pericardial sac, and contents if present);

(b)(2) Liver (portions exhibiting lesions or, in grossly normal organs, the drained gall bladder and adjacent liver tissues);

(b)(3) Ovary-Testes (entire inactive ovary or testes, but if ovary is active, use own judgment and include any atypical ova);

(b)(4) Oviduct (if active, include any debris and dehydrated ova);

(b)(5) Pancreas; and

(b)(6) Spleen.

(c) Aseptically collect 10-15 g of each organ or site listed in paragraph (b) from each reactor, and grind or blend them completely in 10 times their volume of VI broth. Organs may be processed individually or in combinations where appropriate. Suspensions should be transferred in 10-mL aliquots to 100-mL of both VI and TBG broth and incubated at 37°C for 24 hours. Plate the VI broth on VI and BG agar and plate the TBG broth on BG agar and incubate at 37°C. Examine these plates after 24 and 48 hours of incubation. The contents of the gall bladder can be cultured separately by inoculating 10-mL of VI and TBG broth with cotton swabs and incubating at 37°C for 24 hours. Plate on BG agar and incubate at 37°C. Examine these plates after 24 and 48 hours of incubation.

(d) Where field samples are directly inoculated into enrichment broths and a delay of several days occurs before they reach a laboratory, or if recovery of low numbers of organisms is expected from a primary culture, a secondary enrichment culture should be prepared. Subculture a week-old primary culture by transferring 1-mL of inoculum into a fresh tube of enrichment broth. This secondary enrichment should be incubated at 37°C for 24 hours before plating, (see paragraph (a) of this section). TBG broth is recommended for this procedure.

(e) Make a composite sample of the following parts of grossly normal or diseased tissues from the digestive canal: Crop wall, duodenum, jejunum (including remnant of yolk-sac attachment), both ceca, cecal tonsils, and rectum-cloaca. Aseptically collect 10-15 g of each organ or tissue and grind or blend them completely in 10 times their volume of TBG broth. Transfer 10-mL of composited digestive-canal suspension into 100-mL of TBG broth, and incubate flasks at 42°C for 24 hours. Cultures may be incubated at 37°C if 42° incubators are not available. Plate on BG agar and incubate at 42°C or 37°C. Examine the plates after 24 and 48 hours of incubation.

(f) If preferred, individual cotton swab samples may also be taken from the upper, middle, and lower intestinal tract (including both ceca and the rectum-cloaca). Deposit swabs in 10-mL of TBG broth and incubate at 42°C or 37°C. Examine these plates after 24 and 48 hours of incubation.

(g) Transfer suspect colonies to triple sugar iron (TSI) agar and lysine iron (LI) agar and incubate at 37°C for 24 hours. The Analytical Profile Index for Enterobacteriacae (API) system may be utilized for identification if feasible.

(h) Cultures revealing typical reactions of salmonellae and arizonae on TSI and LI agar slants should be transferred to any of the following appropriate biochemical tests for final identification: Dextrose, lactose, sucrose, mannitol, maltose, dulcitol, malonate, gelatin, urea broth, citrate, lysine decarboxylase, ornithine decarboxylase, methyl red and Voges-Proskauer, KCN, salicin broths, indole, and hydrogen sulfide. Motility or non-motility is demonstrated by inoculating a suitable semisolid medium.[3/] For gram stain, a 24-hour nutrient agar culture should be used. For arizonae identification, make readings daily up to 10 days.

[3/] Formulation for the semisolid motility medium can be obtained from: Isolation and Identification of Avian Pathogens, American Association of Avian Pathologists, Texas A&M University, College Station, TX 77843, 1975.

Proposal No. 25 - Continued

An O-nitrophenyl-beta-D-galactopyranside (ONPG) disc may be used to identify slow lactose fermenters.[4/]

(i) All salmonella cultures should be serologically typed.

REASON:
This proposal is being made in an attempt to update some of the procedures that are recommended for use in the bacteriological examination of Salmonella reactors. Since these are just recommended procedures, cooperating laboratories are free to use other acceptable procedures and techniques. However, since booklets containing the National Plan provisions are used by many countries around the world, these procedures also serve as useful quideline for foreign laboratories.

PROPONENT:
Poultry Improvement Staff, National Poultry Improvement Plan.

REFERENCES

1. Edwards, P. R., and W. H. Ewing. Identification of Enterobacteriaceae. Burgess Publishing Company, Minneapolis, Minnesota. 1972.

2. Ellis, E. M., Chairman and Editor, J. E. Williams, G. H. Snoeyenbos, E. T. Mallinson, and W. J. Martin. (Committee on Salmonellosis and Arizonosis, AAVLD). Culture Methods for the Detection of Animal Salmonellosis and Arizonosis, 1st. ed. The Iowa State University Press, Ames, Iowa. 1976.

3. Morris, George K. Evaluation of Salmonella Culture Procedures. In: Proceedings of the American Association of Avian Pathologists' Salmonellosis Workshop. (Agriculture Research Service, U.S. Department of Agriculture.) Animal Health Division, Hyattsville, Maryland. 1970.

4. Pouriau, Susan S., and W. T. Springer. Evaluation of Secondary Enrichment for selecting Salmonellae in Bobwhite Quail. Avian Disease. 22(1): 1978, pp. 42-45.

4/ ONPG disc are available from: Baltimore Biological Laboratories, Cockeysville, MD 21030.

Proposal No. 25 - Continued

5. Swann, A. I., Department of Veterinary Microbiology, Personal Communication, Auburn University, Auburn, Alabama.

6. United States Department of Agriculture. The National Poultry Improvement Plan and auxiliary provisions. Agricultural Research Service. 1976.

7. Williams, J. E., Research Veterinarian, Personal Communication, South East Poultry Research Laboratory, Athens, Georgia.

8. Williams, J. E., E. T. Mallinson, and G. H. Snoeyenbos. Salmonellosis and Arizonosis. In: Isolation and Identification of Avian Pathogens. (Stephen B. Hitchner, Chairman, Charles H. Domermuth, H. Graham Purchase, James E. Williams.) 1975, pp. 14-33. Arnold Printing Corporation, Ithaca, New York.

Proposal No. 26

Delegates:
B, C, D, & E (Combined)

Part 147 Add a new section (15) to read:

§147.15 Laboratory procedure recommended for the bacteriological examination of mycoplasma reactors[1]/

(a) Turbinates, trachea, air sacs, sinuses, nasal passages, respiratory exudates, synovial fluid, eggs (including yolk, yolk sacs, membranes and allantoic fluid), should be directly cultured with sterile swabs. Aseptic techniques are very important as some organisms may not be suppressed by the antimicrobial agents used in this procedure. Tissue suspensions from large volumes are sometimes desirable from the sites listed above and occasionally from the oviduct and cloaca. Tissues should be ground or blended completed in 10 times their volume of Mycoplasma Broth Medium (MBM), (see paragraph (e) of this section).

(b) Inoculate 5-10 mL of MBM with a swab, wire loop or 1 mL of the tissue suspension. When evidence of growth is observed, lowered pH or turbidity of broth, transfer each broth culture daily to maintain the original isolates. Incubate tubes at 37°C for at least 14 days before discarding as negative. When growth is first observed or if no growth occurs by the 4th or 5th day of incubation; transfer 1 drop of broth culture to a plate of Mycoplasma Agar Medium (MAM), (see paragraph (f) of this section). One drop of culture should also be plated on the appropriate bacteriological media to detect the presence of bacterial contaminants. Several cultures may be inoculated on one plate by using a soft wire loop or a glass rod. Incubate plates 3-5 days at 37°C in a high humidity chamber. The addition of 5% CO_2 or the use of a candle jar may be used if preferred. Tiny circular and translucent colonies with elevated centers are very suggestive of mycoplasma. Indirect lighting and a low power or dissecting microscope are recommended for observation of the colonies as they are rarely more than 0.2-0.3 mm in diameter.

1/ Yoder, H. W., Jr., "Mycoplasmosis." In: Isolation and Identification of Avian Pathogens. (Stephen B. Hitchner, Chairman, Charles H. Domermuth, H. Graham Purchase, James E. Williams.) 1975, pp. 109-117, Arnold Printing Corporation, Ithaca, New York 14850.

(c) Isolates should be serotyped when possible.

(c)(1) Isolates may be shipped in MBM with ice packs if shipment will be in transit less than 2-3 days. Longer shipments require freezing of the MBM at -20°C with dry ice, or shipping MAM slants at room temperature.

(c)(2) Isolates may be stored at -20°C for 2-3 weeks, or they may be stored at -68°C for several years.

(d) Alternate method of culture: An overlay enrichment culture for fastidious and sensitive mycoplasma.

(d)(1) Pour 2-3 mL of MAM into a test tube and tilt the tube until a steep (approximately 45°) slant is obtained. Other containers are acceptable.

(d)(2) Overlay the slant with sufficient MBM, so that the media (including inoculum) covers approximately 2/3 of the agar slope.

(d)(3) Inoculate the culture as indicated in paragraph (b) of this section, except use only 0.1 mL of suspension.

(d)(4) Liberally flush the exposed slant while mixing the MBM and inoculum.

(d)(5) Incubate and examine the overlay as indicated in paragraph (b) of this section.

(e) Preparation of media components:[2/]

(e)(1) Deionized distilled water suitable for cell culture fluids should be used.

[2/] Trade names are used in these procedures solely for the purpose of providing specific information. Mention of a trade name does not constitute a guarantee or warranty of the product by the U.S. Department of Agriculture or an endorsement over other products not mentioned.

Proposal No. 26 - Continued

(e)(2) All glassware should be carefully washed with a non-residue detergent such as Alcojet and rinsed three times in tap water and twice in deionized distilled water.[3]

(e)(3) Thallium acetate in a 10% solution is added to an approximate final concentration of 1:4000; however, highly contaminated specimens may require a final concentration of 1:2000.[4] Thallium acetate is added to deionized distilled water first, except as noted in paragraph (e)(4) of this section, to prevent the precipitation of proteins.

(e)(4) Mycoplasma Broth Base is added to deionized distilled water first if autoclave sterilization is used.[5] Thallium acetate and then the remaining components are added aseptically after cooling the autoclaved media to 45°C or less.

(e)(5) Use sterile deionized distilled water to reconstitute penicillin.

(e)(6) Sterile serum should be inactivated by heating at 56°C for 30 minutes. Swine serum may be used for M. gallisepticum, M. synoviae, M. gallinarum, and M. meleagridis isolation; however, horse serum is usually recommended for M. meleagridis isolation.

(e)(7) Phenol red should be prepared as a 1% solution.

(e)(8) NAD (beta nicotinamide adenine dinucleotide or coenzyme I) should be prepared as a 1% solution.[6]

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[3] Alcojet is available from: Alconox, Inc., New York, NY 10003.

[4] Thallium acetate may be obtained from Fischer Scientific Company.

[5] Mycoplasma Broth Base may be obtained from: (a) Product #M 33600, Gibco Diagnostics, 2801 Industrial Drive, Madison, WI 53711. (b) Product #3900-3212, Scott Laboratories, Inc., 8 Westchester Plaza, Elmsford, NY 10523. (c) ICN-Nutritional Biochemicals, 26201 Miles Road, Cleveland, OH 44128.

[6] NAD Grade III may be obtained from: Sigma Chemical Company, P.O. Box 14508, St. Louis, MO 63178.

(e)(9) Cysteine hydrochloride, prepared as a 1% solution, is used to reduce the NAD for M. synoviae growth.

(e)(10) A purified agar product such as Noble (Special agar) is used in the MAM.[7/]

(e)(11) Adjust the pH with NaOH.

(e)(12) Sterilization may be accomplished by two methods:

(e)(12)(i) Filtration sterilization through a 0.20 micron filter is the recommended method. Aseptic techniques must be utilized.

(e)(12)(ii) Autoclave sterilization at 120°C, 15 pounds pressure (103 kPa), for 15 minutes may be used, if preferred, when following the procedure described in Paragraph (d)(3).

(e)(13) Phenol red, dextrose, and DPN may be omitted when culturing for M. meleagridis and M. gallinarum. M. meleagridis grows best in the presence of 1% yeast autolysate.

(f) Mycoplasma Broth Medium (Frey) is prepared as follows:

To 1000 mL of deionized distilled water;
Add:

Thallium acetate (mL)	2.5	(1:4000)
	5.0	(1:2000)
Mycoplasma Broth Base (g)	22.5	
Aqueous penicillin (units)	500,000	
Sterile serum (mL)	150.0	
Phenol red (mL)	2.5	
NAD (mL)	12.5	
Cysteine hydrochloride (mL)	12.5	
Dextrose (g)	3.0	

Adjust pH to 7.8
Filter sterilize

[7/]Noble Agar may be obtained from: Difco Laboratories, Box 1058-A, Detroit, MI 48201.

(f)(1) Broth may be stored at -40°C.

(f)(2) Thaw as needed and store at 4°C for not more than 15 days.

(g) Mycoplasma Agar Medium (Frey) is prepared as follows:

To 1000 mL of deionized distilled water;
Add:

Mycoplasma Broth Base (g)	22.5	
Adjust pH to 7.8		
Purified agar (g)	18.0	
Autoclave and cool in 45°C water bath		
Thallium acetate (mL)	2.0	(1:4000)
Sterile serum at 45°C (mL)	150.0	
Aqueous penicillin (units)	400,000	
NAD (mL)	12.5	
Cysteine hydrochloride (mL)	12.5	

(g)(1) Rotate flask gently and pour about 15 mL of media into each petri dish.

(g)(2) Stack petri dishes only 2-3 high in a 37°C incubator for 16-20 hours to remove excess moisture.

(g)(3) Wrap inverted plates in sealed bundles and store at 4°C for not more than 15 days.

(h) Quality control of new components or media batches should be monitored to compensate for changes in formulation due to alterations of purity, concentration, preparation, etc. Duplicate cultures made on old and new media should be inoculated with a known series of titrations from a single culture. The media should be compared on the basis of growth, colony size, and numbers of colonies which develop.[8/]

[8/] "Laboratory Procedures And Medium For The Isolation Of Mycoplasma From Clinical Materials." Laboratory Diagnosis of Mycoplasma in Food Animals, Proceeding of Nineteenth Annual Meeting, The American Association of Veterinary Laboratory Diagnostician, 1976, pp. 106-115, AAVLD, 6101 Mineral Point Road, Madison, WI 53705.

Proposal No. 26 - Continued

REASON:
The Plan provisions have never contained recommended procedures for the bacteriological examination of mycoplasma reactors. The procedures set forth in this section may serve as a guide to laboratories, but other accepted procedures may be used. By having these suggested procedures in the booklet containing the Plan provisions, foreign laboratories as well as foreign customers of U.S. Stock are given an insight into some of the techniques used in our programs.

PROPONENT:
Poultry Improvement Staff, National Poultry Improvement Plan.

REFERENCES

1 Adler, H. E., R. Yamamoto, and R. A. Bankowski. "A Preliminary Report of Efficiency of Various Mediums for Isolation of Pleuropneumonia-Like Organisms from Exudates of Birds with Chronic Respiratory Disease." American Journal of Veterinary Research. 1954, 15:463-465.

2. Code of Federal Regulations, Animals and Animal Products. 9 CFR, 1978, pp. 281-282; §11328 "Detection of mycoplasma contamination."

3. Goll, F., Jr., Personal Communication, Diagnostic Bacteriology Laboratory, Ames, Iowa.

4. Hofstad, M. S., Editor, and B. W. Calnek, C. F. Helmboldt, W. M. Reid, H. W. Yoder, Jr., Diseases of Poultry, 7th ed., 1978, pp. 233-270, Iowa State University Press, Ames, Iowa.

5. Keenum, K. G., and staff. Personal Communication. Rollins Diagnostic and Disease Laboratory, Raleigh, North Carolina.

6. "Laboratory Procedures and Medium for the isolation of Mycoplasma from clinical materials." Laboratory Diagnosis of Mycoplasma in Food Animals, Proceedings of Nineteenth Annual Meeting, The American Association of Veterinary Laboratory Diagnosticians, 1976, pp. 106-115, AAVLD, Madison, Wisconsin.

7. Stein, G., Jr., and staff. Personal Communication. Animal Health Laboratory, Salisbury, Maryland.

8. Yoder, H. W., Jr., Research Veterinarian. Personal Communication. Southeast Poultry Research Laboratory, Athen, Georgia.

Proposal No. 27

Delegates:
B, C, D, & E (Combined)

Part. 147 Add a new section (16) to read:

§147.16 Procedure for the evaluation of Mycoplasma reactors by in vivo bio-assay (enrichment). This procedure has been shown to be sensitive enough to detect less than 100 mycoplasma organisms under proper conditions.[1] Proper conditions are defined in this section.

(a) Obtain Specific Pathogen Free (SPF) chickens or turkeys (test birds) and transport them in a manner to prevent their being contaminated by any infectious avian disease.[2]

(a)(1) Maintain test birds in an area that has been effectively cleaned and disinfected and shown to be free of infectious avian diseases by recognized bacteriological sampling procedures.

(a)(2) The area should be isolated from other birds, animals, or facilities so that infectious avian diseases can not spread to the isolation area.

(a)(3) Personnel caring for the test birds should take the necessary precautions (see §147.27 (b)) to prevent the mechanical transfer of any infectious avian diseases from other sources.

(a)(4) Pelleted feed should be purchased from reputable dealers known to take precautions for preventing the contamination of their feed. Isolated facility feed storage areas should be protected from vectors which might contaminate the feed. This includes free flying birds, rodents and other animals.

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[1] Research results are described in the following two publications: (a) Bigland, C. H. and A. J. DaMassa, "A Bio-Assay for Mycoplasma Gallisepticum." In: United States Livestock Sanitary Association Proceedings, 67th, 1963, pp. 541-549. (b) McMartin, D. A., "Mycoplasma gallisepticum in the Respiratory Tract of the Foul." In: The Veterinary Record, September 23, 1967, pp. 317-320.

[2] The term "Test birds" shall be used to describe either chickens or turkeys that are to be used for inoculation, and which are kept in an isolated environment for this purpose.

Proposal No. 27 - Continued

(a)(5) Water supplies should be provided so that no break in isolation could occur.

(b) Test birds to be used for inoculation with contaminated tissues should have a negative pre-inoculation titer for mycoplasma. Acceptable mycoplasma serological tests and criteria for interpreting results are referenced in §147.6.

(b)(1) Inoculated test birds should be isolated from non-inoculated test birds for the length of any experiment. Betweeen experiments, each experimental isolation area should be cleaned and disinfected to meet the specifications of paragraph (a)(1) of this section.

(c) Aseptically obtain turbinate and sinus mucosa, sinus exudates, air sac tissues (including lesions), and synovial fluid from at least four sick or suspect donor birds. In a sterile device, blend the tissues completely in four times their volume of Mycoplasma Broth Medium (Frey), (see §147.15(e)). Add 1,000 units/mL of penicillin to control bacterial contaminants. Suspensions may be made from separate tissues, if preferred.

(c)(1) Inoculate at least four test birds for each donor bird via the abdominal air sac and infraorbital sinus, with 1/2 mL of inoculum per site.

(c)(2) Test birds should be bled every 7 days for 21 days to identify sero-converters.

(c)(3) At 21 days, test birds should be sacrified and bacteriologic isolation and identification of mycoplasma attempted, (see §147.15). Note especially the sites of inoculation for typical mycoplasma lesions.

(d) Donor birds are considered infected when the following conditions exist:

(d)(1) Test birds, with or without air sac lesions, have convalescent immunity as determined by the criteria in §147.6; or

(d)(2) Mycoplasma organisms are isolated and identified from test birds.

Proposal No. 27 - Continued

(e) Laboratory findings may be verified by direct culture of material from sick birds or by inoculating seronegative birds from the suspect flock and comparing convalescent serological findings with those from SPF test birds.

REASON:
A number of diagnostic laboratories are using bio-assay techniques as one means of determining mycoplasma infection in avian species. Therefore, it is being proposed that this procedure be included in the Plan provisions as a guide for this method of evaluation of Mycoplasma reactors.

PROPONENT:
Poultry Improvement Staff, National Poultry Improvement Plan.

Proposal No. 28

Delegates:
B, C, D, & E (Combined)

§147.26(b) Add a new subparagraph (15) to read:

(b)(15) Use only clean and properly disenfected crates and vehicles to haul live poultry to and from the premises.

REASON:
The use of dirty crates and trucks is receiving more and more criticism because of their potential to spread diseases from premises to premises. Since it is being proposed to be put in paragraph (b) this will become a recommended practice rather than a required procedure for the control of Salmonella and Mycoplasma infections.

PROPONENT:
Poultry Improvement Staff, National Poultry Improvement Plan.

Proposal No. 29

Delegates:
B, C, D, & E (Combined)

Part 147 Delete Subpart D, Random Sample Performance Testing Procedures.

REASON:
At the 1954 National Plan Conference the delegates recommended that provisions for on-the-farm and central performance testing programs be included in the Plan. For the next 5 or 6 Conferences, these provisions were modified as the need arose to keep them current with the needs of the industry. As the need for and popularity of these programs lessened, they were gradually deleted from the Plan. Now, there are just three Random Sample Egg Production Test left in the United States and Canada. In addition, the Department, with the publication on Random Sample Production Test data from the 1978-79 tests, will no longer be involved with future test publications. Therefore, this proposal will delete from the Plan provisions, all reference to Random Sample Performance Testing.

PROPONENT:
Poultry Improvement Staff, National Poultry Improvement Plan.

Proposal No. 30

DELEGATES:
B, C, D, & E (Combined)

§147.43 Change paragraph (d) to read:

(d) The duties and functions of the General Conference Committee shall be as follows:

(d)(1) Assist the Department in planning, organizing and conducting the Biennial National Poultry Improvement Plan Conference.

(d)(2) Recommend whether new proposals (i.e., proposals that have not been submitted as provided in §147.44) should be considered by the delegates to the Plan Conference.

(d)(3) During the interim between Plan Conferences, represent the cooperating States in:

(d)(3)(i) Advising the Department with respect to administrative procedures and interpretations of the Plan provisions as contained in 9 CFR.

(d)(3)(ii) Assisting the Department in evaluating comments received from interested persons concerning proposed amendments to the Plan provisions.

(d)(3)(iii) Recommending to the Secretary of Agriculture any changes in the provisions of the Plan as may be necessitated by unforeseen conditions when postponement until the next Plan Conference would seriously impair the operation of the program. Such recommendations shall remain in effect only until confirmed or rejected by the next Plan Conference, or until rescinded by the committee.

(d)(4) Serve as a forum for the study of problems relating to poultry health and as the need arises, to make specific recommendations to the Secretary of Agriculture concerning ways in which the Department may assist the industry in solving these problems.

REASON:
By amending the duties of the General Conference Committee as shown above, they will be consistent with the way they are set forth in Secretary's Memorandum No. 1891, Revised, which is the document which establishes the General Conference Committee as an official Advisory Committee to the Secretary of Agriculture.

PROPONENT:
Poultry Improvement Staff, National Poultry Improvement Plan.

Proposal No. 31

Delegates:
B, C, D, & E (Combined)

§147.45 Change to read:

§147.45 Official delegates.

Each cooperating State shall be entitled to one official delegate for each of the programs prescribed in Subparts B, C, D, and E of Part 145 of this chapter in which it has one or more participants at the time of the Conference. Each State shall be entitled to one additional delegate for each Subpart, except Subpart E, in which one or more primary breeding companies are participating at the time of the Conference. The determination as to whether a breeding company qualifies as a primary breeder shall be made by the Official State Agency with the concurrence of the Service. Qualified breeding companies must have their principal breeding facilities located within the State. The official delegates shall be elected by a representative group of participating industry members and be certified by the Official State Agency. It is recommended but not required that the official delegates be Plan participants. Each official delegate shall endeavor to obtain, prior to the Conference, the recommendations of industry members of his State with respect to each proposed change.

REASON:
The problem of equitable representation among the various segments of the industry in matters relating to the Plan has been addressed many times in the past. At a recent meeting of the General Conference Committee, it was pointed out that primary breeders are usually affected, both directly and indirectly, by most of the changes in the Plan provisions. Therefore, it was felt that they should have an extra voice in deciding what changes should be made. This proposal, in allocating the official voting delegates for the Plan Conference, is a step in that direction.

PROPONENT:
General Conference Committee, National Poultry Improvement Plan.

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